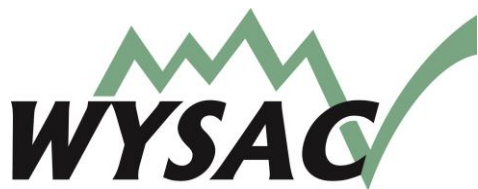


THE IMPACT OF TOBACCO IN WYOMING

2014 Annual Summary



August 2014

CHES-1434

<http://wysac.uwyo.edu>

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TABLE OF CONTENTS

1. Introduction	3
2. Prevalence & Consumption	4
3. Youth Initiation	6
4. Exposure to Secondhand Smoke	10
5. Tobacco Cessation	16
6. Tobacco-Related Disparities	20
7. Burdens of Tobacco Use	23
8. Data Sources	26
9. References	27

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Citation for this document: WYSAC. (2014). *The impact of tobacco in Wyoming: 2014 annual summary* by L. H. Despain, J. R. Simpson, & P. D. Saraff. (WYSAC Technical Report No. CHES-1434). Laramie, WY: Wyoming Survey & Analysis Center, University of Wyoming.

Short reference: WYSAC (2014), *2014 annual summary*.

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The Impact of Tobacco in Wyoming: 2014 Annual Summary provides data on tobacco use prevalence and consumption (Section 2) and the findings associated with the four goals of the Wyoming Tobacco Prevention and Control Program:

- Reduce youth initiation (Section 3),
- Reduce exposure to secondhand smoke (Section 4),
- Promote tobacco cessation (Section 5), and
- Minimize disparities in the burden of tobacco use (Section 6).

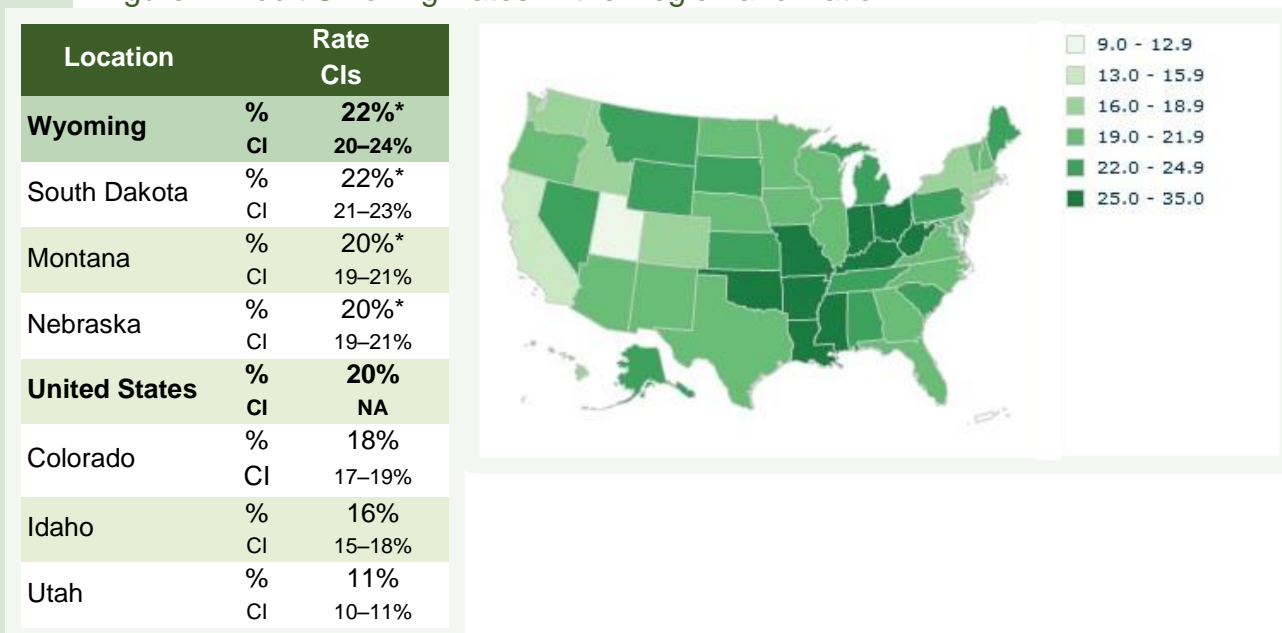
WYSAC also discusses the health and economic burdens of tobacco use in Wyoming (Section 7) and provides information on the major data sources used in compiling this report (Section 8). In reporting the data, WYSAC uses the data sources' conventions for ascertaining statistical significance and for reporting confidence intervals. Using those criteria (generally an alpha of .05 or 95% confidence intervals), WYSAC identifies as *significant* only differences or relationships that have been identified by the data sources as statistically significant or where confidence intervals do not overlap. When confidence intervals are available, WYSAC presents them in tables, in the figures using error-bars, or in brackets in text. Section 9 lists the reference information for materials cited in this document.



2.1. Adult Cigarette Smoking

Current smokers are those who reported smoking at least 100 cigarettes in their lifetime and currently smoke every day or some days. According to the 2012 Behavioral Risk Factor Surveillance System (BRFSS), nearly one in four Wyoming adults smoke (22%) compared to the national median¹ of one in five adults (20%). Wyoming, South Dakota, Montana, and Nebraska are in a statistical tie for the highest smoking rate in the region defined by Wyoming and the six bordering states (Figure 1). Because of changes to the BRFSS methods in 2011, trend analyses are not available. For comparison, the 2011 smoking rate for Wyoming was 23%. The difference between 2011 and 2012 is not statistically significant.

Figure 1. Adult Smoking Rates in the Region and Nation



* These four states are in a statistical tie.

Sources: BRFSS, 2012 (table); Centers for Disease Control and Prevention (CDC), 2014 (map).

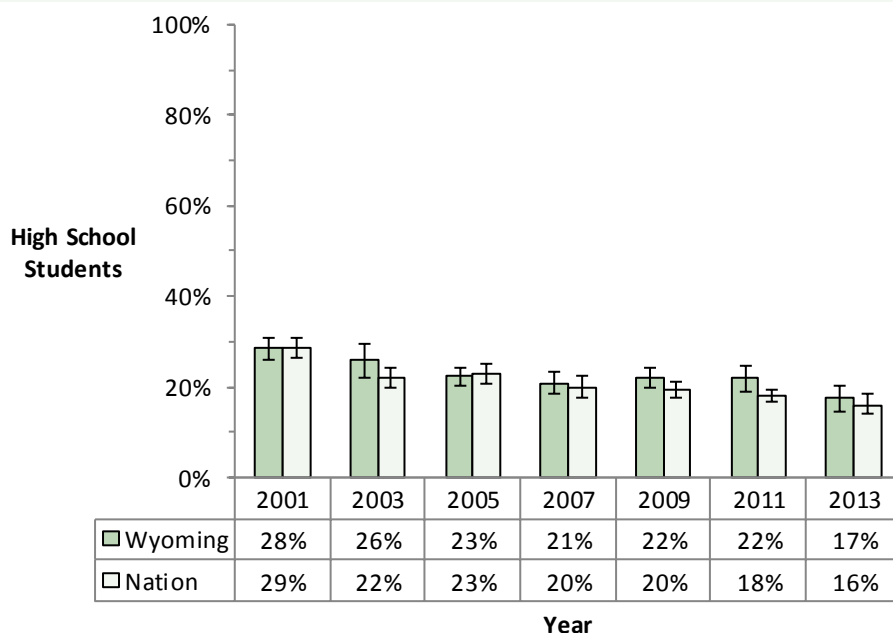
2.2. Adult Smokeless Tobacco Use

A greater proportion of Wyoming adults use smokeless tobacco, compared to the national median. In 2012, 8% [7–10%] of Wyoming adults reported using smokeless tobacco every day or some days, compared to 4% of U.S. adults. A greater proportion of Wyoming men, 15% [13–18%], than women, 1% [1–2%] use smokeless tobacco (BRFSS, 2012).

¹ The national medians are from the 50 states, the District of Columbia, and all U.S. territories. Medians, as reported by BRFSS, do not have confidence intervals.

2.3. Youth Tobacco Use

Figure 2. Youth Smoking Rates in Wyoming and the Nation, 2001–2013

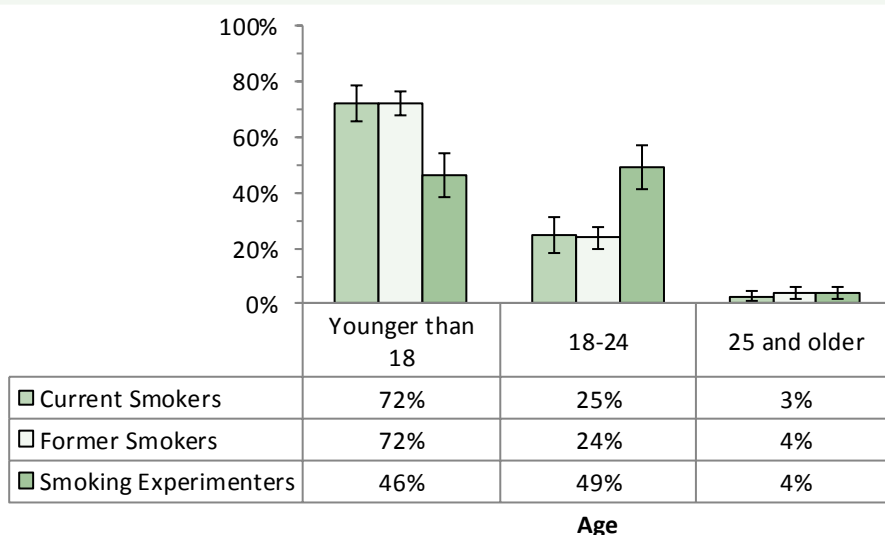


Source. Youth Risk Behavior Surveillance System (YRBSS), 2013, WY YRBS, 2013.

In Wyoming and in the United States, the smoking rate among high school students (students who smoked on one or more of the 30 days prior to being surveyed) declined since 2001. In each year, the Wyoming and national smoking rates have been similar (Figure 2; Youth Risk Behavior Surveillance System [YRBSS], 2013; WY YRBS, 2013).

3.1. Initiation as Reported by Adult Smokers

Figure 3. Smoking Initiation, by Age, 2012



Source: WYSAC, 2014a.

Overall, it is clear that most Wyoming adults who are or have been smokers began smoking before the legal age of 18, as indicated by the age at which they first smoked a whole cigarette. Few current smokers, former smokers, or smoking experimenters (adults who had not smoked at least 100 cigarettes in their lifetime but had tried cigarette smoking) reported starting smoking after the age of 24 (Figure 3). Among current smokers, the age of smoking initiation appears to be increasing. Between 2010 and 2012, the percentage of current smokers who reported first smoking a whole cigarette before the legal age of 18 decreased by 14 percentage points. In the same time frame, the percentage of smokers who reported first smoking a cigarette between the ages of 18 and 24 increased by 13 percentage points. Among former smokers, the changes between 2010 and 2012 were relatively small and not statistically significant (WYSAC, 2014a).

Like current and former smokers, few experimental smokers first smoked a whole cigarette after the age of 24. Unlike current and former smokers, the percentage of experimental smokers who first smoked a cigarette before the legal age of 18 compared to between the ages of 18 and 24 are similar. As with former smokers, the changes between 2010 and 2012 were relatively small and not statistically significant (WYSAC, 2014a).

3.2. Preventing Youth Access

One approach for preventing youth initiation of tobacco use is to limit access to tobacco products (Starr et al., 2005). The Substance Abuse and Mental Health Services Administration (SAMHSA) requires states to complete random, unannounced, annual inspections of tobacco retailers, *Synar inspections*. SAMHSA requires the noncompliance rate in Synar inspections to be below 20%. During Synar inspections, trained 16- to 17-year old inspectors use standardized protocols to attempt to purchase cigarettes or smokeless tobacco from a sample of Wyoming tobacco retailers accessible to minors. Violations during Synar inspections do not result in actual sales, so citations are not issued. In 2013, Wyoming's Synar noncompliance rate was 8% [7–9%] (WYSAC, 2013b). Since 2007, clerks not asking inspectors for identification has been the strongest predictor of retailer violations in Synar inspections.

Table 1. Law Enforcement Noncompliance Rates, 2003–2013²

Year	Number of Retailers Checked	Noncompliance Rate
2003	339	15%
2004	618	12%
2005	754	15%
2006	760	11%
2007	756	13%
2008	819	17%
2009	741	16%
2010	656	10%
2011	745	13%
2012	911	7%
2013	781	11%

Each year, the Wyoming Association of Sheriffs and Chiefs of Police (WASCOP) conducts additional inspections of tobacco retailers. During WASCOP inspections, trained adolescent inspectors attempt to purchase cigarettes from Wyoming tobacco retailers. Unlike Synar inspections, these compliance checks allow law enforcement officers to issue citations to merchants who sell to minors. WASCOP and WYSAC partner to compile and analyze the results of these inspections. WASCOP noncompliance rates have been lower than 18% since 2003 (Table 1).

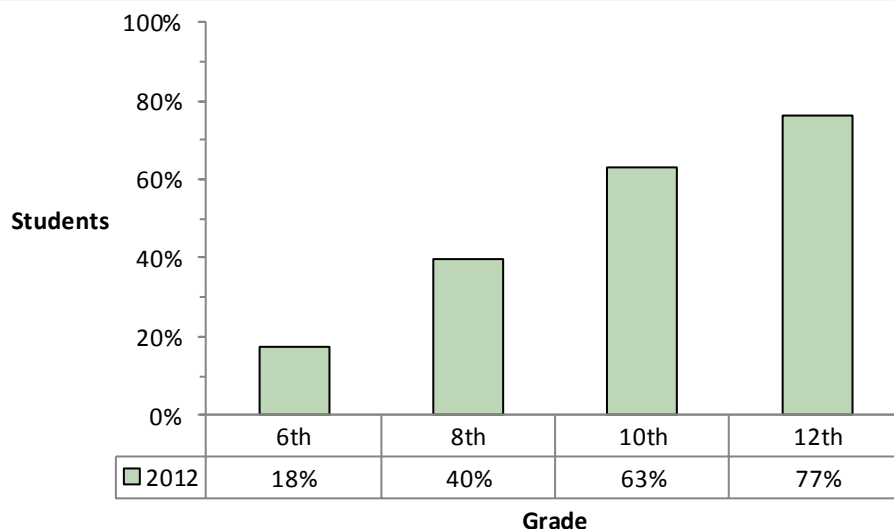
Sources: 2003–2006 data from the Wyoming Department of Health, Mental Health and Substance Abuse Services Division,³ 2007; 2007–2013 data from WYSAC, 2013a

² Confidence intervals are not available for these data.

³ Most services offered by the Mental Health and Substance Abuse Services Division, including those related to tobacco, are currently offered by the Public Health Division.

Even though retailers are generally compliant with laws restricting youth access to tobacco products (WYSAC, 2013a, 2013b), data show that underage youth can access tobacco despite legal restrictions. They obtain tobacco from relatives, unrelated adults, unrelated minors, buying it themselves, taking it, and other non-specified sources (Prevention Needs Assessment [PNA], 2012; Wyoming Youth Risk Behavior Survey [WY YRBS], 2013; YRBSS, 2013).

Figure 4. Student* Perceptions that Access to Cigarettes is Easy†, 2012⁴



* Younger than 18 years of age.

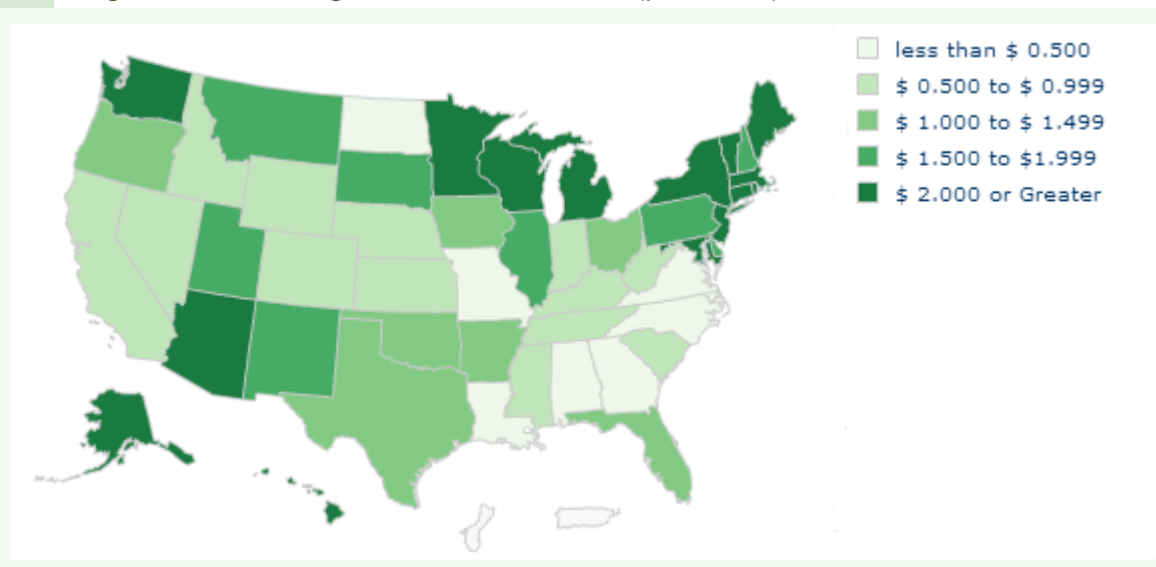
† Sort of easy or very easy combined.

Source: PNA, 2012.

In 2012, 50% of Wyoming students under the age of 18 said it would be easy (either *sort of easy* or *very easy*) to “get some cigarettes.” The perceived ease of access to cigarettes varied by students’ grade level. In general, students in higher grades perceived access to cigarettes as easier than the students in lower grades (Figure 4; PNA, 2012). Additionally, during the 2013 Synar compliance checks in Wyoming, clerks were more likely to attempt to sell tobacco to older minors (WYSAC, 2013b). Together, these findings suggest that it may be easier for youth to purchase or otherwise access cigarettes as they approach the age of 18.

⁴ Confidence intervals are not appropriate for these attempted census data.

Figure 5. State Cigarette Excise Taxes (per Pack), 2014



Source: CDC, 2014.

Increasing the price of tobacco products, generally by increasing taxes, is another strategy to reduce youth initiation of tobacco use (Starr et al., 2005; Chaloupka, Yurekli, & Fong, 2012; Guide to Community Preventive Services, 2014a). Excise taxes are levied at different levels of government. On April 1, 2009, the federal cigarette excise tax increased from \$0.39 to \$1.01 per pack, an increase of \$0.62. Wyoming last raised the state cigarette excise tax on July 1, 2003, when the rate increased from \$0.12 to \$0.60 per pack. For comparison, the average weighted (by market share) price of a pack of cigarettes, not including taxes, went up from \$3.56 in 2003 to \$4.90 in 2012 (Orzechowski & Walker, 2012). With state and federal excise taxes, the current average weighted (by market share) price of a pack of cigarettes is \$6.51. The average state tax rate is \$1.48 (not including the federal tax). State tax rates vary considerably with a low of \$0.17 per pack in Missouri to a high of \$4.35 per pack in New York. Wyoming is tied with Kentucky for the 11th lowest excise tax in the nation (Figure 5 Centers for Disease Control and Prevention [CDC], 2014).

Consistent with every state that has implemented a significant cigarette tax increase (Farrelly et al., 2013), Wyoming experienced a significant increase in tax revenue when it last raised its cigarette excise tax. Wyoming cigarette excise tax revenue increased from a monthly average (May 2001 to April 2003) of \$452,000 to a monthly average (December 2009 to November 2011) of \$1.84 million (WYSAC, 2012a).



Wyoming Excise Tax



Federal Excise Tax

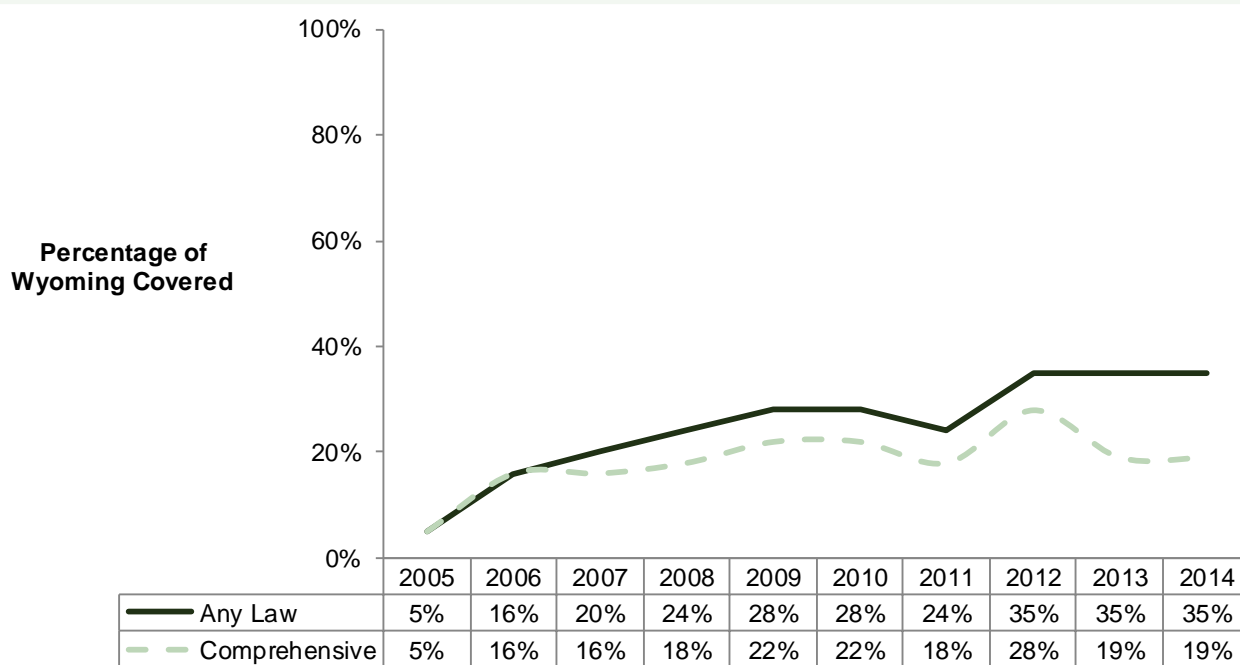


Average State Excise Tax

4.1. Smokefree Indoor Air Laws

Smokefree indoor air policies have demonstrated effectiveness in reducing youth initiation, reducing exposure to secondhand smoke, and increasing cessation of tobacco use (Guide to Community Preventive Services, 2014b). Since the city of Laramie enacted the first smokefree indoor air law in the state of Wyoming in 2005, the coverage (Figure 6) and number (Table 2, following page) of Wyoming's smokefree indoor air laws have increased. Specific aspects of the current laws throughout Wyoming differ: The law in Lyman includes a clause that allows business owners to opt out by prominently displaying signs identifying the business as a smoking establishment (Lyman Municipal Code, 2011). Because WYSAC does not have data about the decisions of all individual business owners in Lyman, WYSAC does not include Lyman residents as covered by a smokefree indoor air law. *Comprehensive smokefree indoor air laws* cover workplaces, restaurants, and bars. The law in Casper (enacted in 2012) originally covered workplaces, restaurants, and bars. In 2013, Casper City Council amended the law to include exemptions for bars, private clubs, and healthcare facilities (Byer, 2013; Walton, 2013).

Figure 6. Wyoming Population Covered by Smokefree Indoor Air Laws⁵



Note: Population percentages for years 2005–2010 were calculated based on 2007 Census estimates. Population percentages for 2011–2014 were calculated using 2010 Census estimates [ca.2012]. Sources: Afton Municipal Code, 2008; Burlington Municipal Code, 2008; Byer, 2013; Casper Municipal Code, 2012; Cheyenne Municipal Code, 2006; Evanston Municipal Code, 2007; Green River Municipal Code, 2007; Huelsmann, 2011; Laramie Municipal Code, 2005; Mountain View Municipal Code, 2011; Rock Springs Municipal Code, 2008; Walton, 2013.

⁵ In 2009, the Teton County Board of Health passed the Teton District Smokefree Air Rule of 2009. In 2011, this law was overturned by a district judge (Huelsmann, 2011).

Five cities in Wyoming have comprehensive smokefree indoor air laws (Table 2; Burlington Municipal Code, 2008; Cheyenne Municipal Code, 2006; Evanston Municipal Code, 2007; Laramie Municipal Code, 2005; Mountain View Municipal Code, 2011). Four additional laws cover workplaces and restaurants, but not bars (Afton Municipal Code, 2008; Byer, 2013; Casper Municipal Code, 2012; Green River Municipal Code, 2007; Rock Springs Municipal Code, 2008; Walton, 2013).

Table 2. Wyoming Towns with Smokefree Indoor Air Laws as of June 2014

City	Comprehensive Smokefree Law	Law Covers Workplaces	Law Covers Restaurants	Law Covers Bars
Burlington	✓	✓	✓	✓
Cheyenne	✓	✓	✓	✓
Evanston	✓	✓	✓	✓
Laramie	✓	✓	✓	✓
Mountain View	✓	✓	✓	✓
Afton		✓	✓	
Casper		✓	✓	
Green River		✓	✓	
Rock Springs		✓	✓	

Sources: Afton Municipal Code, 2008; Burlington Municipal Code, 2008; Byer, 2013; Casper Municipal Code, 2012; Cheyenne Municipal Code, 2006; Evanston Municipal Code, 2007; Green River Municipal Code, 2007; Laramie Municipal Code, 2005; Mountain View Municipal Code, 2011; Rock Springs Municipal Code, 2008; Walton, 2013.



As of August 2014, Wyoming did not have a statewide smokefree indoor air law. However, every one of the states bordering Wyoming had some sort of statewide smokefree indoor air law. Five of the six bordering states had *comprehensive* smokefree indoor air laws (Figure 7). Utah implemented a non-comprehensive law in 1995 (CDC, 2011); the law became comprehensive in 2009. South Dakota implemented a non-comprehensive law in 2002; the law became comprehensive in 2010. Idaho implemented a non-comprehensive law in 2004. Montana implemented a non-comprehensive law in 2005; the law became comprehensive in 2009. Colorado implemented a comprehensive law in 2006. Nebraska implemented a comprehensive law in 2009 (CDC, 2014).

[illegible]

2014 Annual Summary

4.3. Smokefree Policies

Voluntary smokefree policies in workplaces, restaurants, bars, and homes also provide some protection from secondhand smoke.

Table 3. Attitudes toward Secondhand Smoke, 2012

Respondents who...	Rate	
Thought breathing smoke from other people's cigarettes or from other tobacco products is very or somewhat harmful to one's health.	%	96%
	CI	96-97%
Reported that smoking ban policies for indoor public places should be strictly enforced.	%	93%
	CI	92-95%
Reported that smoking ban policies for outdoor public places should be strictly enforced.	%	76%
	CI	74-78%

Most Wyoming adults want to avoid exposure to secondhand smoke (Table 3).

Source: WYSAC, 2014a.

Table 4. Comprehensive and Indoor Smokefree Policies in Wyoming Workplaces, 2011⁶

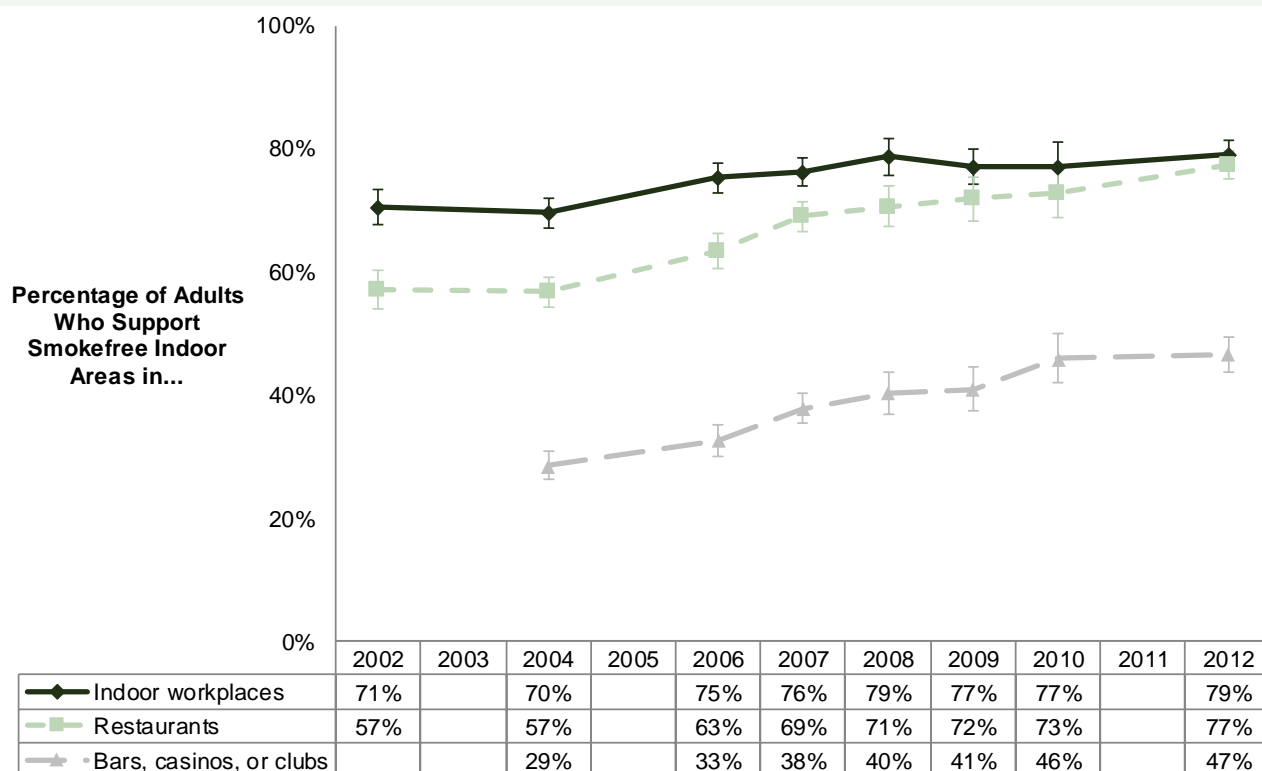
Field	Percentage with Comprehensive Policy	Percentage with Indoor Policy
Education/government	30%	48%
Healthcare/service	17%	25%
Other	6%	23%
Retail/food	4%	14%
Transportation/construction	4%	10%
Mining/petroleum/energy	2%	9%
Manufacturing	0%	3%
Overall	13%	24%

Source: WYSAC, 2011.

The 2011 Wyoming Workplace Tobacco Survey documented the existence and implementation of smokefree policies in Wyoming workplaces with more than 25 employees. Comprehensive policies prohibit smoking by anyone, at any time, both indoors and outdoors. Comprehensive and indoor smokefree policies are most common in the field of education/government. Of the 640 surveyed workplaces, 13% had a written, comprehensive smokefree policy; 24% had an indoor smokefree policy (Table 4; WYSAC, 2011).

⁶ Confidence intervals are not available for these attempted census data.

Figure 8. Trends in Support for Smokefree Venues



Note. Support for smokefree indoor areas of each venue increased from baseline to 2012. Blank cells indicate years in which there was no ATS or comparable survey. The 2002 ATS did not have an item about support for smokefree indoor areas of bars, casinos, and clubs.

Source: WYSAC, 2014a.

Support for smokefree indoor areas of workplaces; restaurants; and bars, casinos, or clubs has significantly increased since WYSAC began measuring each (Figure 8). The majority of Wyoming adults (79%) reported that smoking should never be allowed in indoor workplaces, an increase from 70% in 2002 (WYSAC, 2014a). For comparison, in 2010, 82% of U.S. adults reported that smoking should never be allowed in indoor workplaces (King, Dube, Tynan, 2013).

Support for eliminating secondhand smoke from indoor dining areas of restaurants grew from 57% of Wyoming adults in 2002 to 78% in 2012 (WYSAC, 2014a). For comparison, in 2010, 75% of U.S. adults reported that smoking should not be allowed in indoor dining areas of restaurants (King et al., 2013).

Support for eliminating secondhand smoke from indoor areas in bars, casinos, or clubs grew from 29% of Wyoming adults in 2004 to 47% in 2012 (WYSAC, 2014a). For comparison, in 2010, 50% of U.S. adults reported that smoking should not be allowed in indoor areas of bars, casinos, or clubs (King et al., 2013).

Table 5. Tobacco Use Policies and Exposure to Secondhand Smoke at Indoor Workplaces, 2012

Indoor workers who...		Rate
Reported that smoking in indoor areas of their workplace was never allowed.	%	91%
	CI	89–94%
Had breathed the smoke from someone who was smoking at their indoor workplace in the past 7 days.	%	18%
	CI	14–21%
Reported that smoking in outdoor areas of their workplace was never allowed.	%	27%
	CI	23–31%

Source: WYSAC, 2014a.

Most Wyoming adults who work primarily indoors are covered by policies prohibiting smoking in the indoor area of their workplaces, but these policies do not completely protect Wyoming workers from secondhand smoke (Table 5; WYSAC, 2014a).

A school is considered tobacco-free when there is a policy that specifically prohibits the use of *all types of tobacco* (including cigarettes, smokeless tobacco, cigars, and pipes) *by all people* (all students, faculty/staff, and visitors) *at all times* (including during non-school hours) *and in all places* (including school-sponsored events held off campus). In 2012, 49.7% of Wyoming secondary schools had tobacco-free policies (Demissie et al., 2013).

Table 6 Smokefree Rules in the Home, 2012

Respondents who...		Rate
Reported that smoking inside their home was never allowed in any place	%	87%
	CI	85-89%%
Had someone (other than themselves) smoking inside their home while they were at home in the past 7 days	%	8%
	CI	7-10%

Source: WYSAC, 2014a.

Few adults in Wyoming allow smoking in their homes (Table 6).

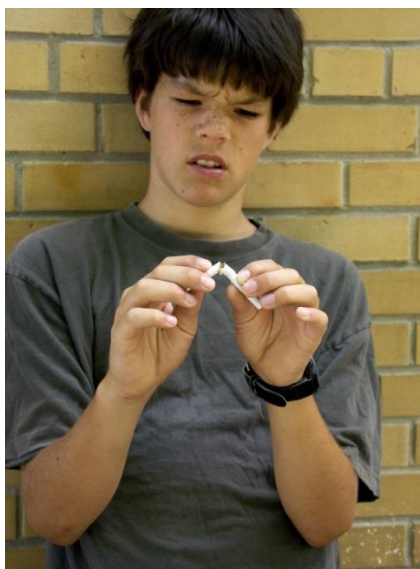
5.1. Benefits of Cessation

Table 7. Health Benefits of Cessation over Time

Time Since Last Cigarette	Benefit
20 minutes	Heart rate and blood pressure drop.
12 hours	The carbon monoxide level in the bloodstream drops to normal.
2 weeks to 3 months	Circulation improves and lung function increases.
1 to 9 months	Coughing and shortness of breath decrease. Cilia in the lungs regain normal function, increasing the ability to handle mucus, clean the lungs, and reduce the risk of infection.
1 year	The excess risk of coronary heart disease is half that of a continuing smoker.
5 years	Risks of cancers of the mouth, throat, esophagus, and bladder are cut in half. Cervical cancer risk falls to that of a nonsmoker. Stroke risk decreases to that of nonsmokers.
10 years	The lung cancer death rate is about half that of a continuing smoker; the risks of cancers of the larynx or pancreas decrease.
15 years	The risk of coronary heart disease is that of a nonsmoker.

Source: American Cancer Society (ACS), 2012.

Smoking cessation has various short- and long-term health benefits (Table 7). Some health effects of smoking cessation (e.g., increased lung functioning) are evident within a few weeks or months of quitting, suggesting that relatively brief periods of abstinence have health benefits. Others (e.g., reduced risk of stroke) are not fully evident for five years or longer, reflecting the long-term benefits of successful smoking cessation (American Cancer Society [ACS], 2012). Additional research suggests that smoking cessation stops pathogenic processes which lead to cancer (CDC, 2010).



5.2. Cessation among Wyoming Smokers

In 2012, 86% [80%, 92%] of current smokers had made a quit attempt during their lifetime; 55% [47%, 63%] of those smokers had tried to quit within the previous year (WYSAC, 2014a).

- Among current smokers who tried to quit in the previous year, 62% [51%, 73%] did not use the Wyoming Quit Tobacco Program (WQTP) or proven medications (nicotine replacement therapy [NRT] or prescription medications) during their most recent quit attempt.
- The most popular cessation aid was NRT: 28% [18.4%, 37.6%] of current smokers who had made a recent quit attempt used NRT.

Table 8. Current Smokers' Awareness of Cessation Assistance and Advertising, 2012

Respondents who...	Rate	
Were aware of quitline services to help them quit.	%	75%
	CI	69-81%
Had encountered advertising about quitting cigarettes in the month prior to being surveyed.	%	77%
	CI	71-83%

Most Wyoming smokers said they were aware of cessation assistance and advertisements for cessation services (Table 8).

Source: WYSAC, 2014a.

5.3. The Wyoming Quit Tobacco Program (WQTP)⁷

The Wyoming Quit Tobacco Program (WQTP) assists Wyoming residents who want to quit using tobacco by providing them with over-the-counter NRTs or vouchers for prescription medication and by offering them free cessation coaching services. WYSAC conducts a follow-up survey of WQTP enrollees seven months after enrollment. This summary includes information on WQTP participants who enrolled between July 1, 2013, and June 30, 2014, and those who WYSAC surveyed between February 2014 and June 2014, seven months after they enrolled in the WQTP. During this period, National Jewish Health provided WQTP services (WYSAC, 2014b).



⁷ Confidence intervals are not available for these attempted census data.

5.3.1. Enrollment and Referral Sources

Figure 9. WQTP Enrollment, July 2013 – June 2014



Source: National Jewish Health, 2014.

Enrollment in the WQTP varies by month. Enrollment was at its lowest in November and August 2013. The highest spike in enrollment was in January 2014 (Figure 9; National Jewish Health, 2014).



Table 9. How Enrollees Learned about the WQTP, July 2013–June 2014

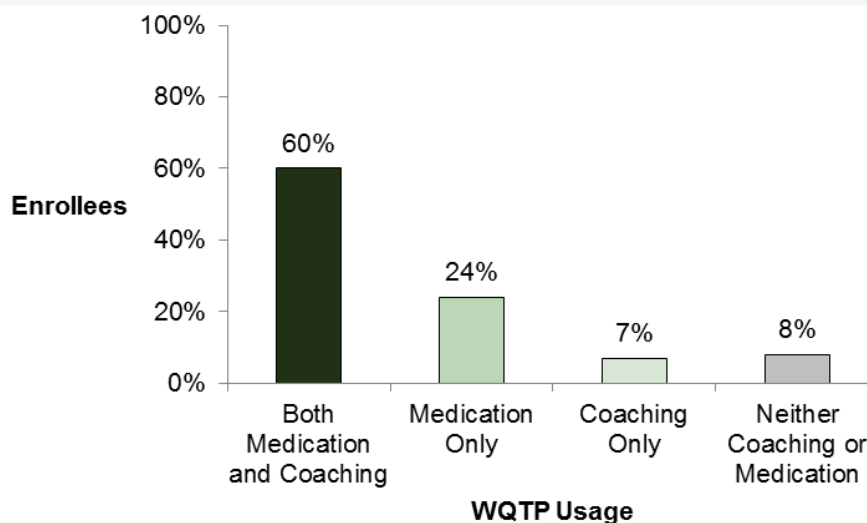
Referral Source	Percentage of WQTP Enrollees
Health professional	28%
Family member or friend	21%
Television	20%
Radio	10%
Flyer or Brochure	6%
Other	5%
Internet/Website	4%
Community Organization	4%
Workplace	2%
Newspaper	1%

A plurality (28%) of WQTP enrollees heard about the program primarily from healthcare professionals. Many others learned of the program primarily from friends and family (21%) or on television (20%; Table 9).

Source: National Jewish Health, 2014.

5.3.2. Use of WQTP Resources

Figure 10. Use of Resource Components among WQTP Enrollees, July 2013–June 2014



The majority (84%) of WQTP enrollees used at least one medication, alone or with coaching. The majority (68%) of WQTP enrollees used at least one form of coaching offered through the program, alone or in combination with medication. The majority (60%) of enrollees used both coaching and medication (Figure 10).

Note. Percentages do not add to 100 because of rounding.

Source: National Jewish Health, 2014.

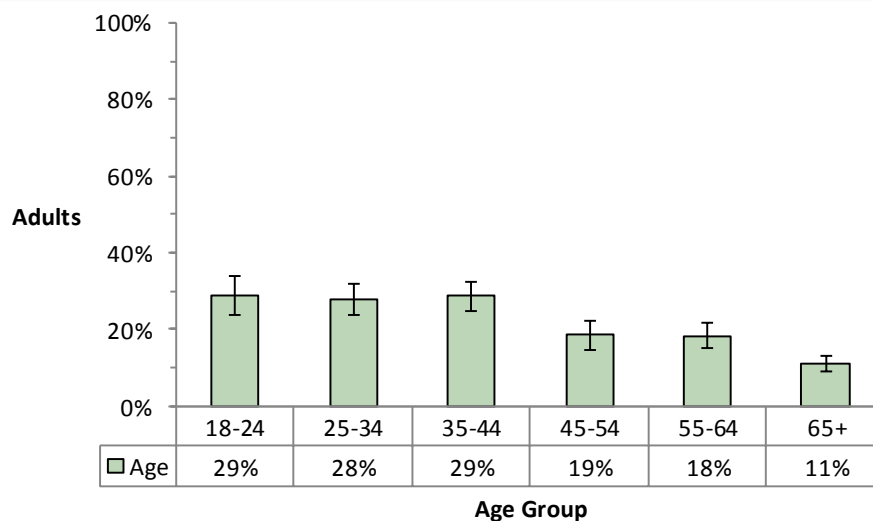
5.3.3. Success in WQTP

Seven months after enrollment, 33% of WQTP survey respondents had not used tobacco in the past 30 days. Quit rates varied by the components enrollees used (WYSAC, 2014b):

- 37% of those who used both medication and coaching reported being quit for 30 days.
- 35% of those who used only medication reported being quit after 30 days.
- 11% of those who used only coaching reported being quit for 30 days.
- 10% of those who used no coaching or medication reported being quit for 30 days.

6.1. Disparities among Adults: Smoking

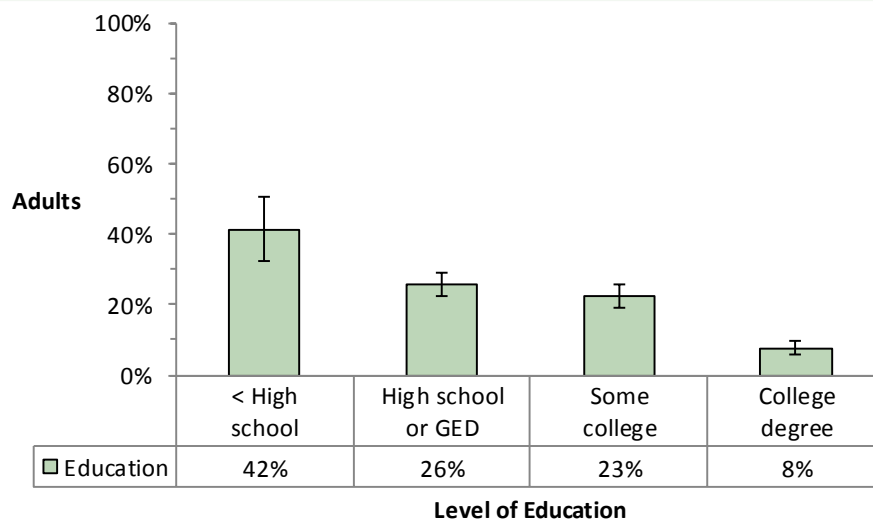
Figure 11. Wyoming Adults Who Currently Smoke, by Age, 2012



Smoking prevalence is lower among older adults than younger adults. This gap first becomes apparent with the 45–54 year-old age group. The percentage of those 65 and older who smoke is the lowest of all age groups (Figure 11).

Source: BRFSS, 2012.

Figure 12. Wyoming Adults Who Currently Smoke, by Education, 2012

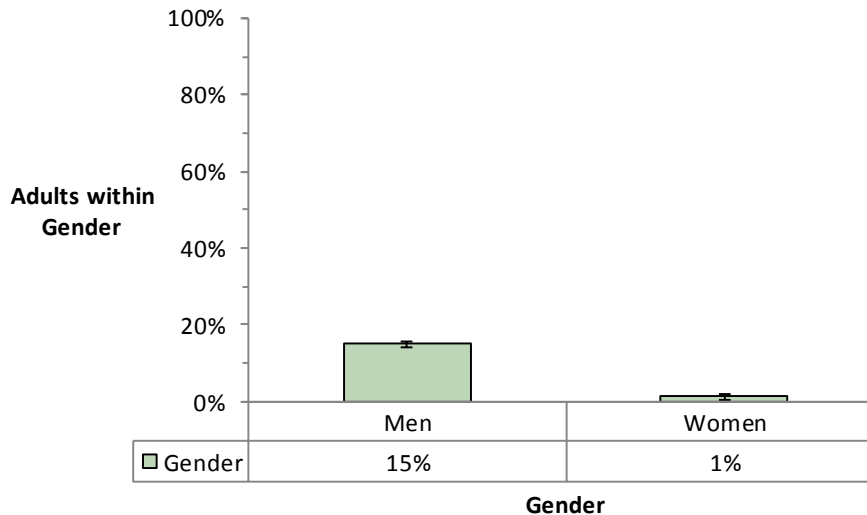


People with more education are less likely to be smokers (Figure 12).

Source: BRFSS, 2012.

6.2. Disparities among Adults: Smokeless Tobacco Use

Figure 13. Gender Differences in Smokeless Tobacco Use among Wyoming Adults, 2012

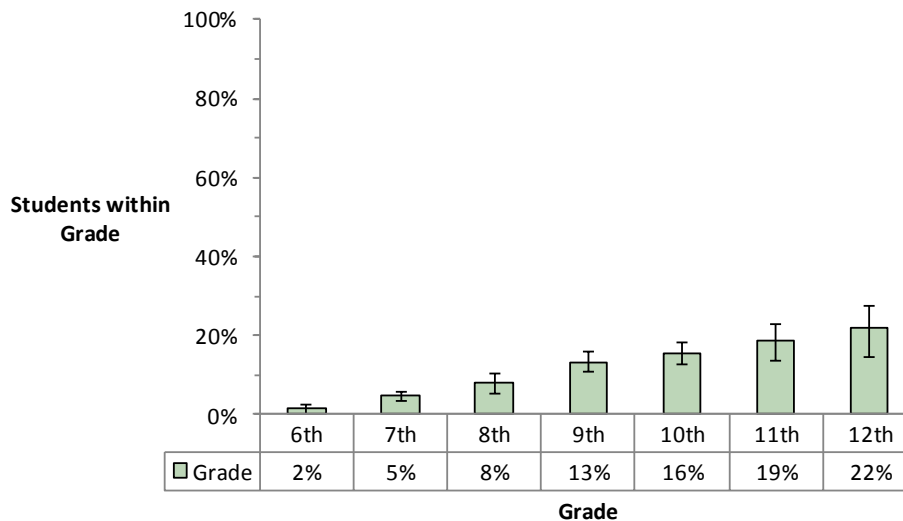


Unlike smoking (which does not show a statistically significant gender difference), men are more likely than women to use smokeless tobacco (Figure 13).

Source: BRFSS, 2012.

6.3. Disparities among Youth

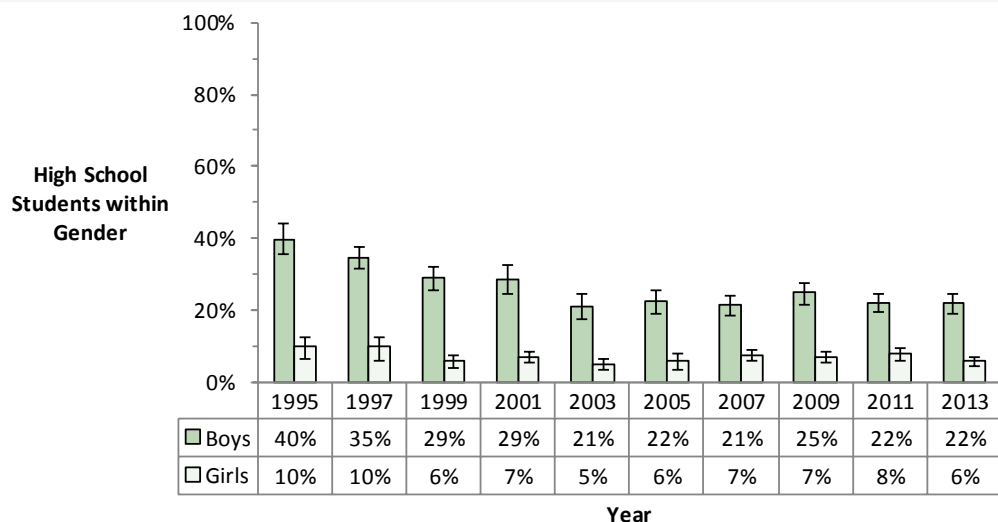
Figure 14. Wyoming Students Who Smoke, by Grade, 2013



In Wyoming, older students are more likely to smoke (students who smoked on one or more of the 30 days prior to being surveyed), with the largest jump in prevalence occurring between 8th and 9th grades (Figure 14).

Source: WY YRBS, 2013.

Figure 15. Smokeless Tobacco Use among Wyoming Middle and High School Students, by Gender, 1995-2013

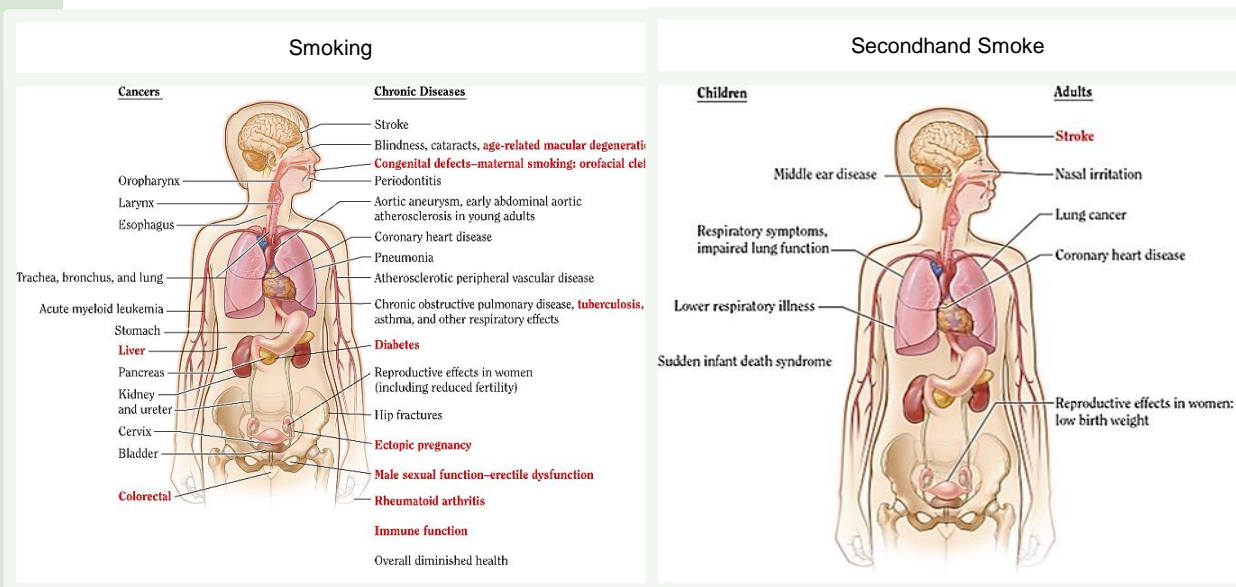


Source: YRBSS, 2013.

In each iteration of the YRBSS, high school boys in Wyoming have used smokeless tobacco at a significantly higher rate than high school girls. For young men, the use of smokeless tobacco has significantly declined since 1995, but it has not significantly changed for young women (Figure 15).

7.1. Health Burdens

Figure 16. Health Consequences Causally Linked to Smoking and Exposure to Secondhand Smoke



Source: U.S. Department of Health and Human Services (USDHHS), 2014.

Although there is no safe level of exposure to tobacco smoke, greater exposure increases the risk for and severity of chronic disease. Cigarette smoke contains cancer-causing agents and chemicals linked to biological mechanisms that cause cardiovascular diseases, pulmonary diseases, respiratory diseases, and contribute to poor reproductive and dental health. More than 7,000 toxic chemicals comprise cigarette smoke, including ammonia, tar, and carbon monoxide. These chemicals increase the risk for developing several preventable chronic diseases for smokers and those who breathe secondhand smoke (Figure 16; U.S. Department of Health and Human Services [USDHHS], 2014).



Table 10. Prevalence of Chronic Health Conditions by Smoking Status, 2010

Individuals Who Were Told by a Healthcare Professional They Had...		Smoked at Least 100 Cigarettes	Smoked Fewer than 100 Cigarettes
High blood pressure, or hypertension	%	31%	23%
	CI	28–35%	20–26%
High cholesterol	%	26%	20%
	CI	22–29%	18–23%
Asthma	%	15%	11%
	CI	12–19%	9–14%
Heart disease	%	11%	4%
	CI	9–13%	3–5%
Chronic lung disease (other than asthma)	%	9%	2%
	CI	7–11%	1–2%
Cancer (other than skin cancer)	%	9%	4%
	CI	7–11%	3–5%
Diabetes	%	11%	6%
	CI	9–13%	4–7%
Gestational diabetes*	%	1%	1%
	CI	0–1%	0–1%

* Indicates the lack of a statistically significant difference for smoking status, Pearson's chi-squared, $p > .05$, for smoking status.

Source: WYSAC, 2014a.

Chronic diseases are leading causes of death and sickness in the United States and Wyoming (Kochanek et al., 2011). Smoking is the leading preventable cause of chronic disease and death in the United States (USDHHS, 2010). WYSAC analyzed the results of the 2012 Wyoming Adult Tobacco Survey (2012 ATS) and found that current and former smokers (adults who had smoked at least 100 cigarettes in their lifetime) were significantly more likely to have been diagnosed with high blood pressure, high cholesterol, asthma, heart disease, chronic lung disease, cancer (the survey item excluded skin cancer, but did not specify any other cancers), and/or diabetes than nonsmokers (adults who had smoked fewer than 100 cigarettes in their lifetime; Table 10; WYSAC, 2014a).



7.2. Economic Burdens

Table 11. Substance Abuse Related Total Health Care Costs in Wyoming, 2010

Category	Specialty Treatment	Medical Care	Total
Tobacco	\$1.22	\$238.41	\$239.63
Alcohol	\$17.98	\$188.32	\$206.30
Other drugs	\$10.73	\$135.42	\$146.16

Source: WYSAC, 2012b.

In 2010, tobacco cost Wyoming nearly \$240 million, including private and public costs, more than drugs and alcohol (Table 11).

Table 12. Productivity Losses in Wyoming, 2010, in Millions

Category	Impaired Productivity	Hospitalization	Mortality
Alcohol	\$358.04	\$0.77	\$188.69
Tobacco	\$234.57	\$0.91	\$214.44
Other drugs	\$68.81	\$0.38	\$78.81

Source: WYSAC, 2012b.

WYSAC estimated that tobacco cost the state of Wyoming nearly \$450 million in productivity losses in 2010, with higher mortality costs than alcohol and other drugs (Table 12).



ATS. The Wyoming Adult Tobacco Survey (ATS) is a standardized telephone survey that collects information on tobacco use prevalence and consumption, attitudes about tobacco policies, environmental tobacco smoke, and on tobacco cessation methods and rates. WYSAC has administered the ATS seven times (2002, 2004, 2006, 2007, 2008, 2009, and 2012), under contract to the Wyoming Department of Health. Many survey items on the ATS are comparable to items on the 2010 National Adults Tobacco Survey administered by IDf under contract with the CDC. WYSAC analyzed Wyoming data from the National Adult Tobacco Survey and includes that data in trends and other comparisons. The latest ATS report is at <http://wysac.uwyo.edu/wysac/ReportView.aspx?DocId=4757&A=1>

PNA. WYSAC administers the Prevention Needs Assessment (PNA; under contract to the Wyoming Department of Health) as a biennial survey of all 6th, 8th, 10th, and 12th grade students enrolled in public schools in the state of Wyoming. It represents an in-depth look at substance use and problem behavior among Wyoming youth. As a census survey, confidence intervals, margins of error, and statistical tests of differences are irrelevant. For interactive graphing of PNA data and the latest PNA report, go to <http://pnasurvey.org/>

Synar. The Synar Amendment, enacted in 1992, requires states to have laws prohibiting the sale and distribution of tobacco products to persons under 18 and to enforce those laws effectively. The Substance Abuse and Mental Health Services Administration (SAMHSA) implements the Synar Amendment and requires states to conduct annual, random, and unannounced inspections of tobacco retailers to ensure compliance with tobacco sales laws. Annually, WYSAC conducts the Wyoming Synar inspections under contract to the Wyoming Department of Health. WYSAC follows formulas provided by SAMHSA to calculate confidence intervals, margins of error, and statistical significance in assessing differences. The latest Synar report is at <http://wysac.uwyo.edu/wysac/Reports.aspx?ProjectId=30>

U.S. Census. The U.S. Census Bureau provides data on the population of each municipality, county, state and the nation as a whole. The latest U.S. Census Bureau data on Wyoming is at: <http://quickfacts.census.gov/qfd/states/56000.html>

WQTP. Under contract to the Wyoming Department of Health, Public Health Division, WYSAC conducts monthly surveys of WQTP enrollees to assess WQTP quit rates and client satisfaction. The survey also assesses enrollees' use of coaching, NRTs, or prescription medications and opinions of different program elements. The latest WQTP report is at <http://wysac.uwyo.edu/wysac/ReportView.aspx?DocId=4758&A=1> WYSAC also reports enrollment data provided by the WQTP provider, National Jewish Health, in this Summary.

BRFSS. The Behavior Risk Factor Surveillance System (BRFSS) dataset aggregates data from all states and provides statewide data for Wyoming adults on risk factors and conditions related to the leading causes of death, including tobacco consumption and exposure to secondhand smoke. In Wyoming, the BRFSS is conducted annually by the Wyoming Department of Health with guidance from the CDC. Available national BRFSS data are medians. Reporters of BRFSS data calculate statistically significant differences or changes over time using 95% confidence intervals (meaning that WYSAC is 95% confident that the true population value lies between the upper and lower bounds). WYSAC identified statistically significant assessments of differences and changes over time for BRFSS data when confidence intervals do not overlap. Confidence intervals for national BRFSS data are unavailable. BRFSS data are at <http://cdc.gov/brfss/>

School Health Profiles Survey. The School Health Profiles Survey (Demissie et al., 2013) gathers data from Wyoming school principals and health teachers to assess school health programs and practices. The Wyoming Department of Education (WDE) administers this survey biennially. As a census survey, confidence intervals, margins of error, and statistical tests of differences are irrelevant. The report on the 2012 School Health Profiles survey is at http://www.cdc.gov/healthyyouth/profiles/2012/profiles_report.pdf

Wyoming Workplace Tobacco Survey. The 2011 Wyoming Workplace Tobacco Survey documents the existence and implementation of tobacco policies in Wyoming businesses with more than 25 employees. As a census survey, confidence intervals, margins of error, and statistical tests of differences are irrelevant. The report on the 2011 Wyoming Workplace Tobacco Survey is at <http://wysac.uwyo.edu/wysac/ReportView.aspx?DocId=437&A=1>

WY YRBS and YRBSS. The Wyoming Youth Risk Behavior Survey (WY YRBS) provides statewide data on health risk behaviors of Wyoming students, including tobacco use. The WY YRBS is conducted annually by the Wyoming Department of Education with guidance from the CDC. Reporters of WY YRBS data calculate statistically significant differences or changes over time using 95% confidence intervals (meaning that WYSAC is 95% confident that the true population value lies between the upper and lower bounds). WYSAC identified statistically significant assessments of differences and changes over time for WY YRBS and YRBSS data when confidence intervals do not overlap. WY YRBS data are at <http://edu.wyoming.gov/data/yrbs/>, YRBSS data are at <http://www.cdc.gov/healthyyouth/yrbs/index.htm>

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